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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,538	03/03/2000	Shuhei Yoshida	012300-032	5495

21839 7590 09/10/2003

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 09/10/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

A91

Office Action Summary

Application No.

09/518,538

Applicant(s)

YOSHIDA ET AL.

Examiner

Alexis Wachtel

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 and 14-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7,8,10. 6) ☐ Other: _____

Detailed Action

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5,13, drawn to a coking oven, classified in class 202, subclass 139+.
 - II. Claims 6-12,14-42, drawn to a method of using coking oven, classified in class 432, subclass misc.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the instant process can be practiced by a coking oven not defined into a first and second zone.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Pete Skiff on 8-8-2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-5 and 13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-12,14-42 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,017,270 to Janicka et al.

Janicka et al discloses a coke oven comprising:

With respects to claim 1, an array of combustion chambers separated from carbonization chambers by oven walls (Fig.1), each combustion chamber comprising a rich gas port (Fig.1 item 7), and one or two air ports or a pair of a lean gas port (Fig.1 item 5a) and an air port (Fig.1 item 3a), all of the ports being located on the bottom of the combustion chamber; characterized in that the combustion chamber is defined into a first zone and a second zone by a center line extending in the direction of coke pushing (Fig.2) , said rich gas port (Fig.1 item 7) located near the oven wall of the first zone, and the center of said one airport or the midpoint connecting the centers of said two airports, or the midpoint connecting the centers of said lean gas port and said air

port is in the second zone.

With respects to claim 2, further charecterized in that one or both of said airports, or one or both of said pair of the lean gas port and the airport are provided with aperture adjusting members for adjusting the flow of air and/or lean gas (Fig.2, item 11a).

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3,4,5 and 13 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,017,270 to Janicka et al.

With respects to claim 3, wherein the coke oven includes an array of combustion chambers separated from carbonization chambers by oven walls (Fig.1), each combustion chamber comprising a rich gas port (Fig.1 item 7), and a pair of lean gas port (Fig.1 item 5a) and and an air port (Fig.1 item 3a), all of the ports are located on the bottom of the combustion chamber, charecterized in that the combustion chamber is

defined into a first zone and a second zone by a center line extending in the direction of coke pushing, said rich gas port (Fig.1 item 7) located near the oven wall of the first zone. Janicka et al fails to explicitly teach that the midpoint connecting the centers of said lean-gas port and said airport is in the second zone lean gas port and said air port do not completely overlap in any of the directions when viewed both in a direction of coke pushing and in a direction of oven battery of said combustion chamber. However, Janicka et al broadly teaches per the coke oven must be provided with poor gas ports and air supply ports without defining or limiting their placement. Absent any showing of unexpected results, having arranged the air port and poor gas port so that they do not overlap when looked at in a a direction of coke oven width and length would have been obvious to one of ordinary skill in the art with a reasonable chance of operational success.

With respects to claim 4 Janicka et al fails to explicitly teach that when viewed both in the direction of coke pushing and in the direction of oven battery of said combustion chamber, the overlapped length of said airport and said lean gas port in each direction is 80% or less of the complete overlapped length. However, Janicka et al broadly teaches per the coke oven must be provided with poor gas ports and air supply ports without defining or limiting their placement. Absent any showing of unexpected results, having arranged the air port and poor gas port so that they overlap by less than the claimed amount when looked at in a direction of coke oven width and length would have been obvious to one of ordinary skill in the art with a reasonable chance of operational success.

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With respects to claim 5 wherein at least one of said airport and said lean gas port is provided with an aperture adjusting the flow of lean gas and/or air (Fig.1, item 11a).

With respects to claim 13, wherein at least on of said airport and said lean gas port is provided with an aperture adjusting member for adjusting the flow of lean gas and/or air (Fig.1, item 11a).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

AW
9-3-03

Glenn Caldarola
Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700